



Florida Department of Environmental Protection

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Secretary

Permittee /Authorized Entity:

Eric P. Summa
Chief, Planning Environmental Branch
Department of the Army
Jacksonville District Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Project Name or Phase:

Herbert Hoover Dike Rehabilitation and Repair - Culverts 4A, 11, and 16 Replacement
Project

ERP Processor: Jerilyn Krug, Jerilyn.Krug@dep.state.fl.us, 561-681-6604

Environmental Resource Permit

State-owned Submerged Lands Authorization - Granted

U.S. Army Corps of Engineers Authorization - Not Applicable

Permit No.: 0234604-011 ES

Permit Issuance Date: June 27, 2011
Permit Expiration Date: June 26, 2016

Consolidated Environmental Resource Permit and State-owned Submerged Lands Authorization

Permittee: U.S. Army Corps of Engineers

Permit No: 0234604-011 ES

Project Name or Phase: Herbert Hoover Dike Rehabilitation and Repair - Culverts 4A, 11, and 16 Replacement Project

AUTHORIZATIONS

Project Description

The project is part of the U.S. Army Corps of Engineers' Herbert Hoover Dike (HHD) Rehabilitation and Repair Project which is expected to enhance the stability of the dike's approximately 143 miles of levees. The replacement of Culverts 4A, 11, and 16 is expected to reduce the risk of failure at these structures located within the HHD.

The U.S. Army Corps of Engineers (Permittee) is authorized to remove Culverts 4A, 11, and 16, which are all single, gated 10-foot diameter corrugated metal culverts and replace them with the following:

- Culvert 4A (C4A): Two 7-foot by 7-foot concrete box culverts with slide/flap combination gates and manatee barriers on each structure. A cut-off wall will be installed for seepage management within the excavated area, under and adjacent to the box culverts. Access ramps will also be provided down to each culvert after the levee cross-section is restored.
- Culvert 11 (C11): Two 7-foot by 7-foot concrete box culverts with slide/flap combination gates and manatee barriers on each structure. A cut-off wall will be installed for seepage management under and adjacent to the box culverts extending to the existing cut-off walls on either side. Access ramps will also be provided down to each culvert after the levee cross-section is restored. A temporary access ramp at the landside toe of the levee will be constructed between Structure S-308 and Culvert 11 to minimize use of the HHD levee in this area.
- Culvert 16 (C16): Two 7-foot by 7-foot concrete box culverts with slide/flap combination gates and manatee barriers on each structure. A cut-off wall will be installed for seepage management under and adjacent to the box culverts extending to the existing cut-off walls on either side. Access ramps will also be provided down to each culvert after the levee cross-section is restored.

Operation of the culvert structures will remain unchanged. The flap gates will open automatically to discharge into Lake Okeechobee from the landside for flood control, and the slide gates will open to discharge from the Lake for water supply. Operation of the new slide gates may be performed remotely.

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Temporary construction activities for the culvert replacement will include construction of a cofferdam, either earthen or structural, on both sides of the culvert, dewatering activities, and installation of bypass pumps for continuation of drainage and/or irrigation supply to and from Lake Okeechobee during construction.

The project described above may be conducted only in accordance with the terms, conditions and attachments contained in this permit. The issuance of this permit does not infer, nor guarantee, nor imply that future permits or modifications will be granted by the Department.

State-owned Submerged Lands Authorization

The Department acts as staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) and issues certain authorizations for the use of sovereign submerged lands. The Department has the authority to review this project under Chapters 253 and 258, F.S., Chapter 18-21, F.A.C., and Section 62-343.075, F.A.C. The proprietary review has determined that portions of this project will occur on sovereign submerged land and will require authorization from the Board of Trustees to use public property.

As staff to the Board of Trustees, we have reviewed the proposed project and it is located within the described boundaries of Board of Trustees Deed Nos. 17054, 19171 and Easement No. IWE00059 dated October 22, 1940 for Culvert 4A; Board of Trustees Deed Nos. 17432, 17179 and Easement No. IWE00064 dated October 22, 1940 for Culvert 11; and Board of Trustees Deed No. 17770 and Easement No. IWE00060 dated October 22, 1940 for Culvert 16. The Board of Trustees has no objection to the project being constructed on sovereign submerged lands. Therefore, pursuant to Chapter 253.77, Florida Statutes, this permit may be considered as authorization from the Board of Trustees to perform the project.

Coastal Zone Management

This permit also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Management Act.

Water Quality Certification

This permit constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

Other Authorizations

You are advised that authorizations or permits for this project may be required by other federal, State or local entities including, but not limited to, local governments and drainage districts. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

PROJECT LOCATION

The activities authorized by this permit and State-owned submerged lands authorization are located within Lake Okeechobee, Class I Waters, and the landward toe ditch of the Herbert Hoover Dike, Class III Waters. Culverts 11 and 16 are located along the eastern edge of Lake Okeechobee within Reach 1A of the Herbert Hoover Dike Rehabilitation and Repair Project in southwestern Martin County and northwestern Palm Beach County, respectively. Culvert 4A is located along the southern edge of Lake Okeechobee adjacent to South Shore Drainage District lands in western Palm Beach County. The specific locations of the culverts are as follows:

- Culvert 4A: Section 4, Township 44 South, Range 36 East, Palm Beach County, Latitude: 26°40'58" N, Longitude: 80°45'01" W;
- Culvert 11: Section 26, Township 40 South, Range 37 East, Martin County, Latitude: 26°57'57"N, Longitude: 80°36'43" W; and
- Culvert 16: Section 35, Township 41 South, Range 37 East, Palm Beach County, Latitude: 26°57'08" N, Longitude: 80°36'38" W.

PERMIT /STATE-OWNED SUBMERGED LANDS CONDITIONS

The activities described herein must be conducted in accordance with:

- **The Specific Conditions**
- **The General Conditions**
- **The limits, conditions and locations of work shown in the attached drawings (Exhibit 1)**
- **The term limits of this authorization**

You are advised to read and understand these conditions and drawings prior to commencing the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings. If you are utilizing a contractor, the contractor also should read and understand these conditions and drawings prior to commencing the authorized activities. Failure to comply with these conditions shall constitute grounds for revocation of the permit and appropriate enforcement action by the Department.

Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit and state-owned submerged lands authorization, as specifically described above.

SPECIFIC CONDITIONS - PRIOR TO CONSTRUCTION

1. **Authorized Construction.** This permit authorizes construction of the Culverts 4A, 11, and 16 Replacement Project, as part of the Herbert Hoover Dike Rehabilitation and Repair Project, in accordance with the documentation submitted to the Department on

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February 2, 2011, April 5, 2011, and April 22, 2011. Prior to commencement of construction, the Permittee shall provide final plans and specifications along with updated design reports for the subject culvert replacements to the Department for review and determination on whether there are any substantial deviations from the authorized construction. A copy of this permit will be kept on site at all times until construction is complete.

2. **Instructions to Construction Personnel and/or Contractors.** The Permittee shall ensure that all construction personnel working on the project are briefed on the permit conditions and shall give a copy of this permit to each contractor and subcontractor before the authorized work begins. Prior to construction, the Permittee shall schedule a pre-construction meeting and invite the contractor(s), the Department, the South Florida Water Management District, and other environmental regulatory agencies. The Department shall receive at least two weeks' prior notice of the meeting (email is the preferred method of notification). Within 30 days from the Notice-to-Proceed to the contractor or upon Permittee's approval of a proposed construction schedule, whichever occurs first, the Permittee shall provide the proposed construction schedule to the Department at the address identified in Specific Condition No. 3.
3. **Address.** The Permittee shall submit reports and notices to the Department in accordance with this permit to the Department's Southeast District Office, Attn: Compliance Officer, Watershed Management and Planning Section, 400 North Congress Avenue, Suite 200, West Palm Beach, FL 33401, and also submit electronically to RPPS_comp@dep.state.fl.us.
4. **Right-of-way Determination.** Prior to working within the project sites, the Permittee shall ensure that the areas are within the described boundaries of easements which were granted on October 22, 1940, by the Board of Trustees of the Internal Improvement Trust Fund to the United States of America for these portions of the Herbert Hoover Dike. If construction activities will be conducted outside of the easement boundaries, then the Permittee may require authorization from other entities.
5. **Threatened and Endangered Species.** The Permittee shall coordinate with both the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (FWS) for appropriate guidance, recommendations and/or necessary authorizations to avoid, minimize, or mitigate impacts to listed species. The Permittee shall comply with federal and State law with regard to protected species and agree to consider input from and to comply with requirements of the FWC to the extent that to do so would not create an irreconcilable conflict with the Permittee's federal responsibilities. The Permittee shall coordinate with all involved federal and State agencies to determine if there are reasonable alternatives that would avoid an irreconcilable conflict.

Prior to construction, the Permittee and/or the contractor shall instruct all personnel associated with the project that threatened and endangered species may be present in

the area, and the need to avoid harming, harassing, or killing these species and the civil and criminal consequences. Some protected species that might be observed in the region include the American alligator, wood stork, snail kite, Eastern indigo snake, manatee, bald eagle, and crested caracara. Construction activities shall be kept under surveillance, management, and control to minimize any interference, disturbance, or impact to these and other protected species.

6. **Environmental Protection Plan.** At least thirty (30) days prior to the commencement of construction, the Permittee shall submit an Environmental Protection Plan to the Department. The Department will review and provide a determination of whether the plan is consistent with Department statutes and rules. The plan shall describe the methods used to protect environmental resources, adjacent wetlands, and fish and wildlife, according to Specific Condition No. 5, to ensure that there shall be no unauthorized impacts to listed species, wetland plants or water quality as a direct result of construction activities.
7. **Soil/Sediment Reuse, Testing and Disposal.** If excavated soil or sediment will be reused onsite or transported off-site, the stockpiled material may need to be characterized for residual concentrations of contaminants. Samples shall be analyzed for arsenic, cadmium, chromium, mercury, copper, barium, and organochlorine pesticides using EPA Methods 6020 and 8081, or an equivalent State method, by a laboratory certified under NELAP by the Florida Department of Health.

A. Reuse of Sediment

Sediment removed from the channels on either side of the culverts that is intended to be reused on-site may need to be sampled and tested depending on the proposed final disposition of the material:

- i) Sediment may be reused on-site without testing if the material is placed at least 1 foot below final grade, regardless of plans for slope stabilization. Alternatively, the sediment may be blended (disked) into established levees on the landward slope of the levee. Placement of this untested sediment is limited to areas outside of public use corridors.
- ii) Sediment that will be reused on-site within 1 foot of final grade shall be stockpiled separately from other excavated materials and analyzed for the parameters outlined above. A minimum of two samples shall be taken. The results of the sediment analyses and a recommendation(s) for reuse or disposal shall be submitted to the Department for concurrence on the plans for disposition of the material. Additional sampling and testing may be requested depending on the results and recommendations.

B. Off-site Disposal

Excavated soils and sediment that will be transported off-site shall be analyzed for the parameters outlined above and the material may be stockpiled on-site until the preliminary analysis is completed. Results of the analyses shall be submitted to the Department. If the excavated material exceeds the Cleanup Target Levels (CTLs) as found in Chapter 62-777, F.A.C., and will be transported to a Solid Waste disposal facility, proper documentation shall also be provided to the Department including, but not limited to, soil transportation and disposal manifests and waste profile documentation.

8. **Wetland Protection.** This project is expected to result in approximately 0.17 acres of permanent and 0.42 acres of temporary wetland and other surface water impacts. Project construction in and near wetlands or other surface waters shall at all times be implemented to minimize impacts on these natural resources. Prior to the commencement of construction, effective physical barriers to prevent encroachment into the protected wetlands and other surface waters shall be installed by the Permittee. The Permittee shall notify the Department in writing at the address identified in Specific Condition No. 3 upon the contractor's placement of staking/fencing/turbidity curtains to schedule a joint inspection of this work. Additionally, the Permittee shall schedule a final site visit with the Department for inspection of the project site after the temporary works have been removed.
9. **Wetland Mitigation and Restoration.** This project will result in the filling of approximately 0.17 acres of low quality wetlands. Mitigation will not be required to offset this minimal impact as it is anticipated that the wetland areas will be restored through natural recruitment.
10. **NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.** The issuance of this permit does not constitute coverage under the National Pollutant Discharge Elimination System (NPDES) Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP) pursuant to Rule 62-621.300(4), F.A.C. Prior to the commencement of any construction, the Permittee is advised to contact the Department's NPDES Stormwater Program at (850) 245-7522 or toll free at (866) 336-6312 or to download application information from the Department's web site at <http://www.dep.state.fl.us/water/stormwater/npdes/construction3.htm#permit>.
11. **NPDES General Permit for the Discharge of Produced Ground Water from any Non-Contaminated Site Activity.** The issuance of this permit does not constitute coverage under the NPDES General Permit for the Discharge of Produced Ground Water from any Non-Contaminated Site Activity pursuant to 62-621.300(2), F.A.C. If any offsite discharges will occur due to construction dewatering activities, then coverage under the aforementioned General Permit may be required and the Permittee is advised to review Rule 62-621.300(2), F.A.C. Before discharge of produced ground water can

occur, analytical tests on samples of the proposed discharge water shall be performed to determine if contamination exists. If the analytical results comply with applicable criteria for use of the General Permit, then a short summary of the proposed activity and copy of the analytical tests shall be sent to the address in Specific Condition No. 3 within one week after discharge begins and the Permittee may proceed with the project while abiding by all conditions of the General Permit.

SPECIFIC CONDITIONS - CONSTRUCTION ACTIVITIES

12. **Construction Best Management Practices.** During construction, the Permittee shall use best management techniques for erosion and sedimentation control. All graded areas shall be stabilized immediately after construction to prevent erosion. The Permittee shall take all reasonable precautions to minimize the suspension and transport of soils, levee materials, and roadway materials into waters adjacent to or downstream of the construction site. Turbidity barriers/curtains or other appropriate measures such as temporary earthen plugs shall be installed in the landward toe ditch upstream and downstream of each active work zone. These turbidity barriers/curtains or other appropriate measures shall be installed to prevent turbidity from escaping from the areas being excavated, backfilled or other work areas.
13. **Mixing Zone.** A turbidity mixing zone for the replacement of Culverts 4A, 11, and 16 is not authorized under this permit.
14. **Turbidity Monitoring.** Effective means of turbidity control, such as, but not limited to, turbidity curtains, shall be employed during all operations that may create turbidity so that it shall not exceed 29 NTU's above background. Turbidity screens may be placed and maintained around the work area. All screens, sheet pile, and other turbidity control devices may remain in place until all turbidity has subsided and state water quality standards are met.

Turbidity monitoring equipment and personnel trained to use it shall be available on site at all times during construction that could generate turbidity. For monitoring purposes, the work area is that area defined by the turbidity curtains. The Permittee shall monitor turbidity levels at least once every four hours during all operations that may create turbidity during construction as follows:

- A. Monitoring samples shall be taken at the following locations for each site:
 1. Background Sample(s): One lakeside and one landward background sample station, at least 100 feet upstream of the construction work area, and clearly outside the influence of any construction activities; and
 2. Compliance Sample(s): One lakeside and one landward monitoring station located directly outside the turbidity curtains downstream of the work site and within the densest portion of any visible turbidity plume.

B. Turbidity monitoring results shall be compiled daily and summarized quarterly (every three calendar months) by project. Beginning with the first calendar month that construction occurs that could generate turbidity in waters adjacent to the construction sites, a report containing the summarized turbidity monitoring results for each project shall be submitted quarterly to the Department at the address listed in Specific Condition No. 3. If no construction occurs that could generate turbidity during the quarterly monitoring period, the report shall be so noted. The reports shall also contain the following information:

1. Permit number;
2. Dates and time of sampling and analysis;
3. A statement describing the methods used in collection, handling, storage and analysis of the samples;
4. A clear description of project activities taking place at the time of sampling;
5. A map indicating the sampling locations; and
6. A statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.

C. Monitoring reports shall also include the following information for each sample that is taken:

1. Water depth
2. Depth of sample
3. Weather conditions
4. Water level stage and direction of flow.

In the event that project-generated turbidity levels beyond the work areas exceed the standard (29 NTU's above background), project activities contributing to elevated turbidity levels shall immediately cease, and the Department shall be notified within 24 hours via email to the addresses listed in Specific Condition No. 3. Work shall not resume until the work can be conducted in compliance with the aforementioned turbidity standard.

15. **Surface Waters.** All construction work in surface waters of Lake Okeechobee, Class I Waters of the State, and the HHD landward toe ditch, Class III Waters of the State, shall be conducted in a manner to comply with State Water Quality Standards.

16. **Haul Roads and Project Access.** A temporary access ramp will be installed to provide construction access for Culverts 11 and 16 and to avoid adjacent construction projects. The ramp will be removed and the area restored to the preexisting condition at the

completion of construction. The Permittee intends to also utilize existing local roads and the HHD right-of-way to access the project sites.

17. **Solid and Hazardous Waste.** The Permittee's construction personnel and/or contractor shall properly handle, store, and dispose of any solid and hazardous waste encountered while completing this project as follows:
- A. Unacceptable and prohibited materials encountered shall be temporarily stored within construction boundaries in containers to prevent spillages and potential stormwater, ground, and/or groundwater contamination. On site storage time shall be limited to thirty (30) days. Materials shall be disposed of at an approved and permitted site.
 - B. Construction and Demolition (C&D) debris and residuals commingled with Class I or Class III material shall be considered Class I or Class III material, respectively, pursuant to Rule 62-701.200(19), F.A.C. C&D debris and residuals commingled with both Classes I and III material shall be considered Class I material. Said materials classified as Class I or Class III material shall be disposed of at an approved and permitted facility within thirty (30) days of encountering such materials.
 - C. A waste determination shall be performed on any segregated potential hazardous waste. If any waste is determined to be hazardous waste, arrangements shall be made to transport said waste via a licensed hazardous waste transporter to an approved hazardous waste disposal site. Temporary on site storage of such hazardous waste shall not exceed thirty (30) days. Any hazardous waste encountered shall be managed in accordance with the provisions of Chapter 62-730, F.A.C.
 - D. All processing of vegetative matter and clean, untreated wood that is made into wood chips, shall be processed and removed within sixty (60) days of encountering such materials. All woody vegetative matter and clean wood that will not be processed into wood chips or burned on site shall be removed within sixty (60) days of encountering these materials. Treated or painted wood shall not be chipped or burned and shall be containerized and disposed of at an approved and permitted facility within thirty (30) days of encountering such materials. Local disposal of treated and painted wood is limited to a Class I landfill or a lined Class III landfill.

SPECIFIC CONDITIONS - POST-CONSTRUCTION / OPERATIONAL ACTIVITIES

18. **Operation, Maintenance, Repair, Replacement and Rehabilitation.** The Permittee shall maintain the restored levee cross-section and structures as needed in the future such that the stability of the HHD levee is enhanced, seepage and piping are reduced, and its capability to convey stormwater runoff and provide water supply is not

adversely impacted. Routine inspections shall be performed by the Permittee to confirm that the restored area's slope and grass cover are adequate, the landward toe ditch is unobstructed, and the hydraulic connections between the new structures and other culverts and lateral ditches are fully functional. No changes to operations are proposed under this authorization.

SPECIFIC CONDITIONS - MANATEE CONDITIONS

19. During all in-water work, the Permittee shall comply with the standard manatee protection construction conditions listed in the attached 2-page "Standard Manatee Conditions for In-Water Work, 2009" (See Exhibit 2).

SPECIFIC CONDITIONS - MONITORING/REPORTING REQUIREMENTS

20. **Annual Status Report.** The Permittee shall submit an "Annual Status Report" to the Department detailing the construction activities. If additional reporting modifications are required, the Permittee may request a modification to the annual report submission date and upon approval by the Department, the Permittee may modify the Annual Report submission date to coincide with other reporting requirements and time periods needed for data acquisition and analysis. The reports shall be submitted on an annual basis for projects exceeding one year of construction. In addition to the permit number and name of the permit administrator, the Annual Reports shall contain, at a minimum, the following information: the project component name, an evaluation of the success of the project component in achieving its objectives, problems encountered during the period covered, actions taken to address problems encountered, and the information listed below:

- **Construction/Operation Summary.** A construction and/or operation summary shall include, at a minimum:
 - i. Executive Summary;
 - ii. Amount of excavated material including volume of material taken off site or brought on-site;
 - iii. Disposal of vegetation either burned or location delivered off-site.
 - iv. Summary of Turbidity Monitoring, **including all of the items listed in Specific Condition 14.**

GENERAL CONDITIONS

21. This permit, including its general and specific conditions, must be construed in light of the February 2006 Interagency Cooperative Agreement for Civil Works Projects (ICA) between the Department and the Corps. As recognized in the ICA, the Department has the authority to include reasonable conditions in this permit. All of the conditions in this permit, both general and specific, are enforceable to the extent sovereign immunity has been waived under 33 U.S.C. §§ 1323 and 1344(t). The ICA is incorporated herein by reference.

22. All activities approved shall be implemented as set forth in the drawings incorporated by reference and in compliance with the conditions and requirements of this document. The Corps shall notify the Department in writing of any anticipated changes in:
- a. operational plans;
 - b. project dimensions, size or location;
 - c. ability to adhere to permit conditions;
 - d. project description included in the permit;
 - e. monitoring plans.

If the Department determines that a modification to the permit is required, then the Corps shall apply for and obtain the modification. Department approval of the modification shall be obtained prior to implementing the change, unless the change is determined by the Department to reduce the scope of work from that authorized under the original permit, and will not affect compliance with permit conditions or monitoring requirements.

23. If, for any reason, the Corps does not comply with any condition or limitation specified herein, the Corps shall immediately provide the Department with a written report containing the following information:
- a) description of and cause of noncompliance;
 - b) period of noncompliance, including dates and times;
 - c) impacts resulting or likely to result from the non-compliance;
 - d) steps being taken to correct the non-compliance; and
 - e) steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

Compliance with the provisions of this condition shall not preclude the Department from taking any enforcement action allowed under state law with respect to any non-compliance.

24. The Corps shall obtain any applicable licenses, permits, or other authorizations which may be required by federal, state, local or special district laws and regulations. Nothing herein constitutes a waiver or approval of other Department permits or authorizations that may be required for other aspects of the total project.
25. Nothing herein conveys to the Corps or creates in the Corps any property right, any interest in real property, any title to land or water, constitutes State recognition or acknowledgment of title, or constitutes authority for the use of Florida's sovereign submerged lands seaward of the mean high-water line or an established erosion control line, unless herein provided, and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State.
26. Any delineation of the extent of a wetland or other surface water submitted as part of the application, including plans or other supporting documentation, shall not be

considered specifically approved unless a specific condition of this authorization or a formal determination under section 373.421(2), F.S., provides otherwise.

27. Nothing herein authorizes any entrance upon or activities on property which is not owned or controlled by the Corps or local sponsor, or convey any vested rights or any exclusive privileges.
28. This document or a copy thereof, complete with all conditions, attachments, modifications, and time extensions shall be kept at the work site of the authorized activity. The Corps shall require the contractor to review this document prior to commencement of the authorized activity.
29. The Corps specifically agrees to allow Department personnel with proper identification, at reasonable times and in compliance with Corps specified safety standards access to the premises where the authorized activity is located or conducted for the purpose of ascertaining compliance with the terms of this document and with the rules of the Department and to have access to and copy any records that must be kept; to inspect the facility, equipment, practices, or operations regulated or required; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance. Reasonable time may depend on the nature of the concern being investigated.
30. At least forty-eight (48) hours prior to the commencement of authorized activity, the Corps shall submit to the Department a written notice of commencement of activities indicating the anticipated start date and the anticipated completion date.
31. If historic or archaeological artifacts such as, but not limited to, Indian canoes, arrow heads, pottery or physical remains, are discovered at any time on the project site, the Corps shall immediately stop all activities in the immediate area which disturb the soil and notify the Department and the State Historic Preservation Officer. In the event that unmarked human remains are encountered during permitted activities, all work shall stop in the immediate area and the proper authorities notified in accordance with Section 872.05, Florida Statutes.
32. Within a reasonable time after completion of construction activities authorized by this permit, the Corps shall submit to the Department a written statement of completion. This statement shall notify the Department that the work has been completed as authorized and shall include a description of the actual work completed. The Department shall be provided, if requested, a copy of any as-built drawings required of the contractor or survey performed by the Corps.

Executed in Palm Beach County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

 6/27/11

Jill S. Creech, P.E. Date
Southeast District Director

JC/WCK/SG/TR/jak

Attachments:

Exhibit 1, Project Drawings and Design Specs., 4 pages

Exhibit 2, Standard Manatee Conditions for In-Water Work, 2009, 2 pages.

Copies furnished to: James McAdams, USACE
Aaron Lassiter, USACE
Mark Shafer, USACE
Art Sengupta, SFWMD
Amie Goddeau, FDOT
Steve Partney, SFWMD
Nimmy Jeyakumar, SFWMD
DCPPermits, FDCA
Michael Hart, FDOS
Rebecca Elliott, FDACS
Robert Pace, USFWS
Steve Schubert, USFWS
ComplianceFWC, FWC
Ron Miedema, USEPA
Juan Betancourt, Florida East Coast Railway
Sam Mallo, South Central Florida Express Rail Line
Palm Beach County Commissioner
Martin County Commissioner
Ernie Marks, FDEP
Stacey Feken, FDEP
Chad Kennedy, FDEP
Dianne Hughes, FDEP
Inger Hansen, FDEP
Tracy Robb, FDEP
Stanley Ganthier, FDEP

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William Rueckert, FDEP
RPPS, FDEP

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this permit and authorization to use sovereignty submerged lands, including all copies, were mailed before the close of business on 6/27/11, to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under 120.52(7) of the Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

James Osborne 6/27/11
Clerk Date

EXHIBIT 1

Figure 1. Location map of the Herbert Hoover Dike culverts to be replaced.

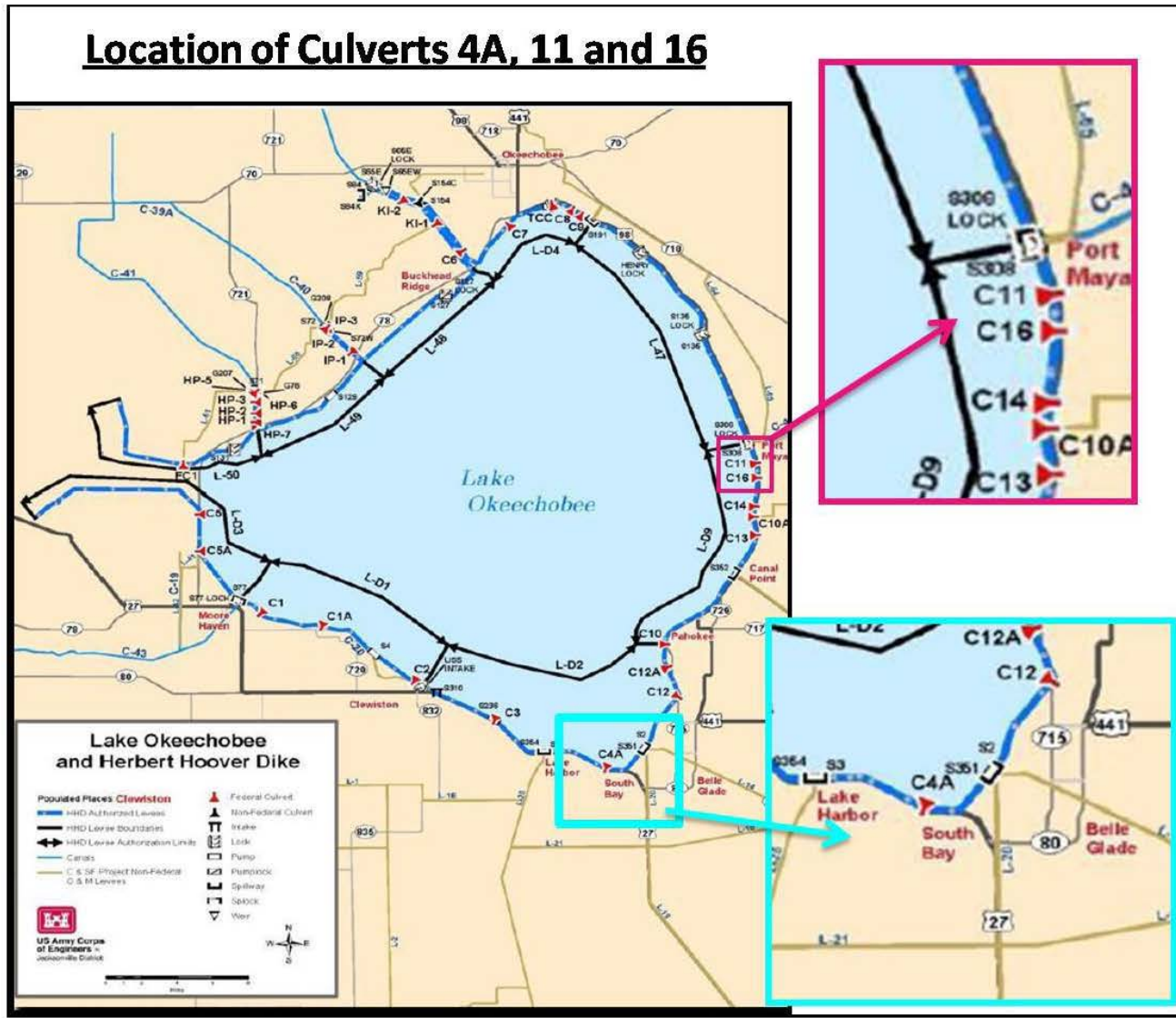


Figure 2. A plan view drawing of Culvert 4A.

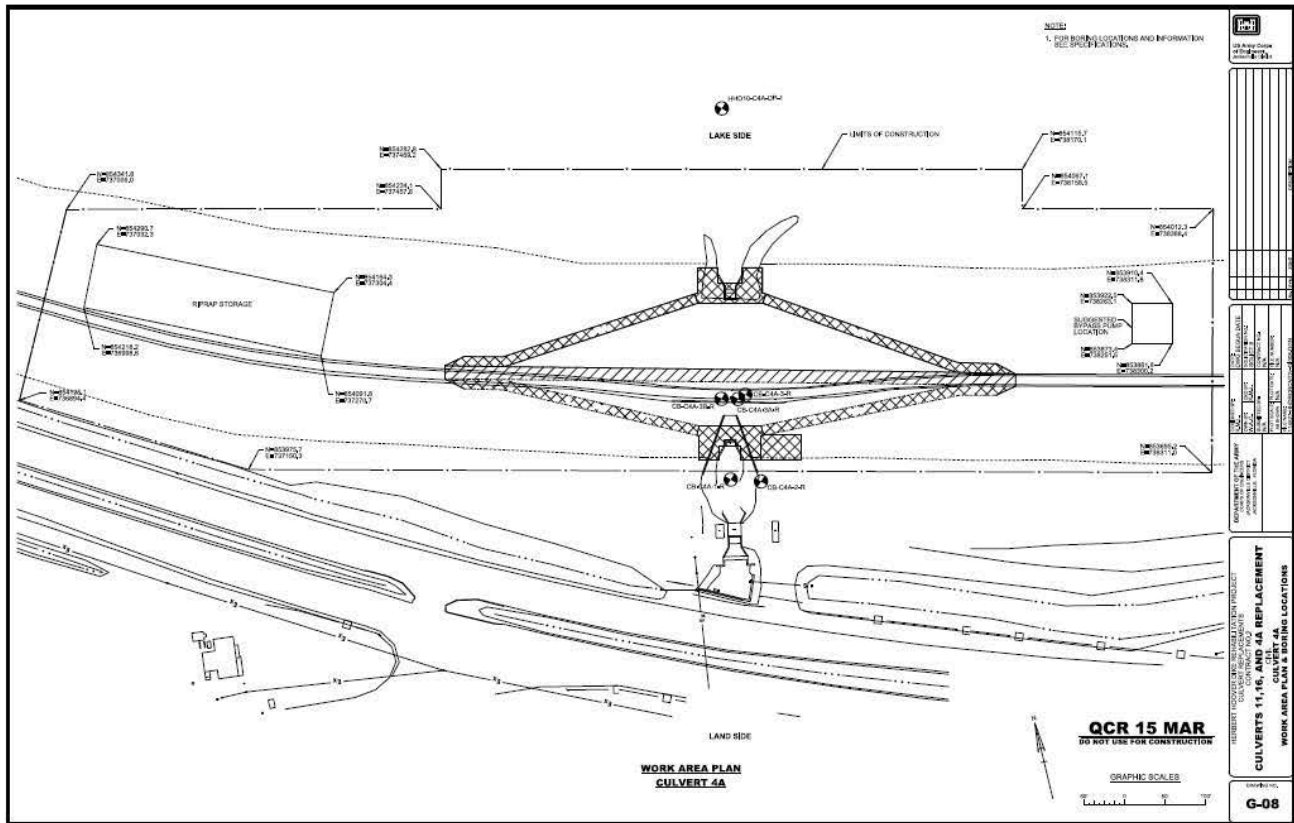


Figure 3. A plan view drawing of Culvert 11.

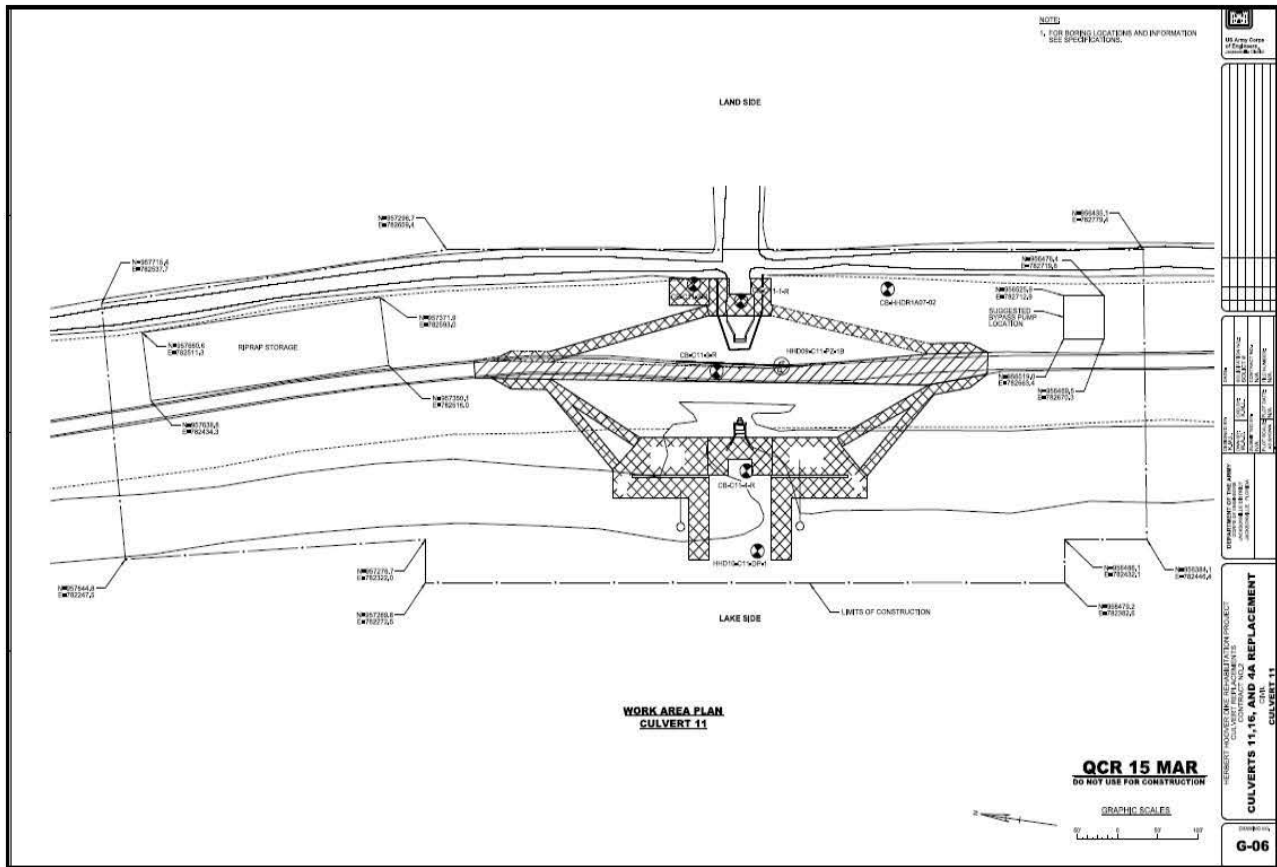


Figure 4. A plan view drawing of Culvert 16.

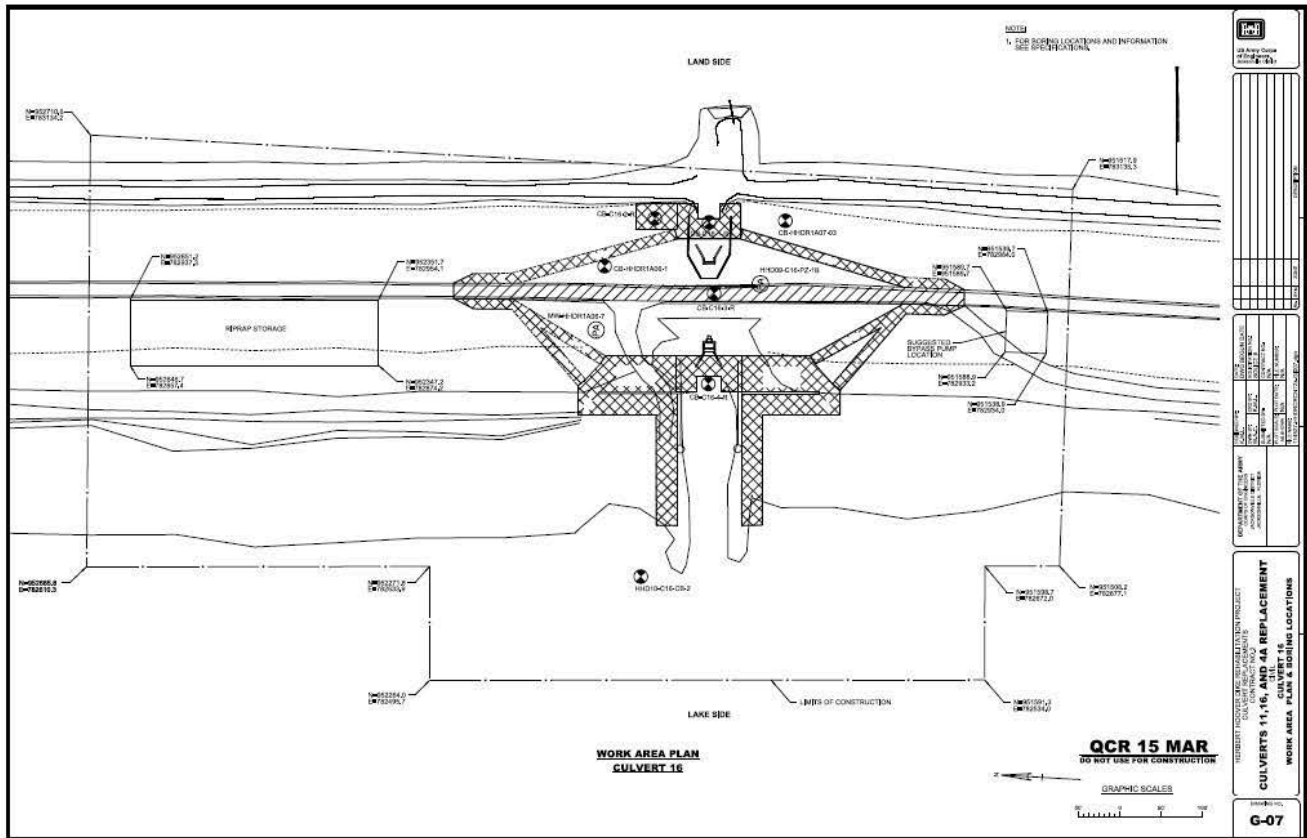


EXHIBIT 2

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK 2009

The Permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with an injury to manatees. The Permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida.
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the Permittee upon completion of the project. Awareness signs that have already been approved for this use by the Florida Fish and Wildlife Conservation Commission (FWC) must be used (see MyFWC.com). One sign which reads *Caution: Boaters* must be posted. A second

sign measuring at least 8 1/2" by 11" explaining the requirements for "Idle Speed/No Wake" and the shutdown of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:
Wildlife Alert:
1-888-404-FWCC(3922)
cell *FWC or #FWC

